

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>P5015PCT</b>	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. <b>PCT/GB2005/000557</b>	International filing date ( <i>day/month/year</i> ) <b>17 February 2005 (17.02.2005)</b>	Priority date ( <i>day/month/year</i> ) <b>17 February 2004 (17.02.2004)</b>	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant <b>MQP LTD</b>			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

	Date of issuance of this report <b>22 August 2006 (22.08.2006)</b>
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 338 82 70	Authorized officer  <b>Nora Lindner</b>  e-mail: pt02@wipo.int

25/03 PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

REC'D 08 JUN 2005

PCT  
WIPO

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

		Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)
Applicant's or agent's file reference see form PCT/ISA/220		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. PCT/GB2005/000557	International filing date (day/month/year) 17.02.2005	Priority date (day/month/year) 17.02.2004
International Patent Classification (IPC) or both national classification and IPC C22B9/02, C22B21/06		
Applicant MQP LTD		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Swiatek, R Telephone No. +49 89 2399-7261	
--	--	---

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2005/000557

**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

a sequence listing  
 table(s) related to the sequence listing

b. format of material:

in written format  
 in computer readable form

c. time of filing/furnishing:

contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.

3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2005/000557

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-20
	No: Claims	
Inventive step (IS)	Yes: Claims	1-20
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-20
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2005/000557

**1. Prior art**

D1: US 2002/056677 A1 (SCHNEIDER WOLFGANG ET AL) 16 May 2002 (2002-05-16)  
D2: EP-A-0 276 576 (ALCAN INTERNATIONAL LIMITED) 3 August 1988 (1988-08-03)

**2. Novelty and inventive step (Art. 33 PCT)**

D1 discloses a method for filtering and adding a grain refining agent comprising passing liquid metal through a porous filter, contacting the filtered metal with a grain refining agent, mechanical mixing of the metal and the grain refining agent and filtering of the melt using a second filter (see claim 11 and Figure).

The method of claim 1 differs from the method according to D1 in that a filter cake formation agent is added to a metal melt. This agent promotes the formation of a suitable filter cake, which consists of deposited non-compressible layers. In this way, the filter cake itself is inherently porous and the pores of the filter remain sufficiently open that metal can flow through without significant change in metallostatic head. Therefore, filter life is increased and the filter is re-usable.

No hint could be found in the available prior art to modify the method of D1 so as to arrive at the claimed invention.

D1 does not address the issue of how the rate of build up of the filter cake is to be controlled.

D2 discloses a method for forming a filter cake by using a pre-wetted additive (filter cake forming agent) on a porous substrate (see p. 3, l. 7-29). D2, however, does not take account of the role of grain refiners in destroying the development of filter cakes.

Therefore, inventive step is acknowledged.

For the same reasons as above, the subject matter of the independent claims 2, 3 and 16 are considered to involve an inventive step.